

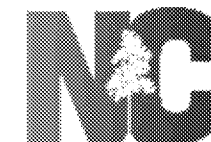
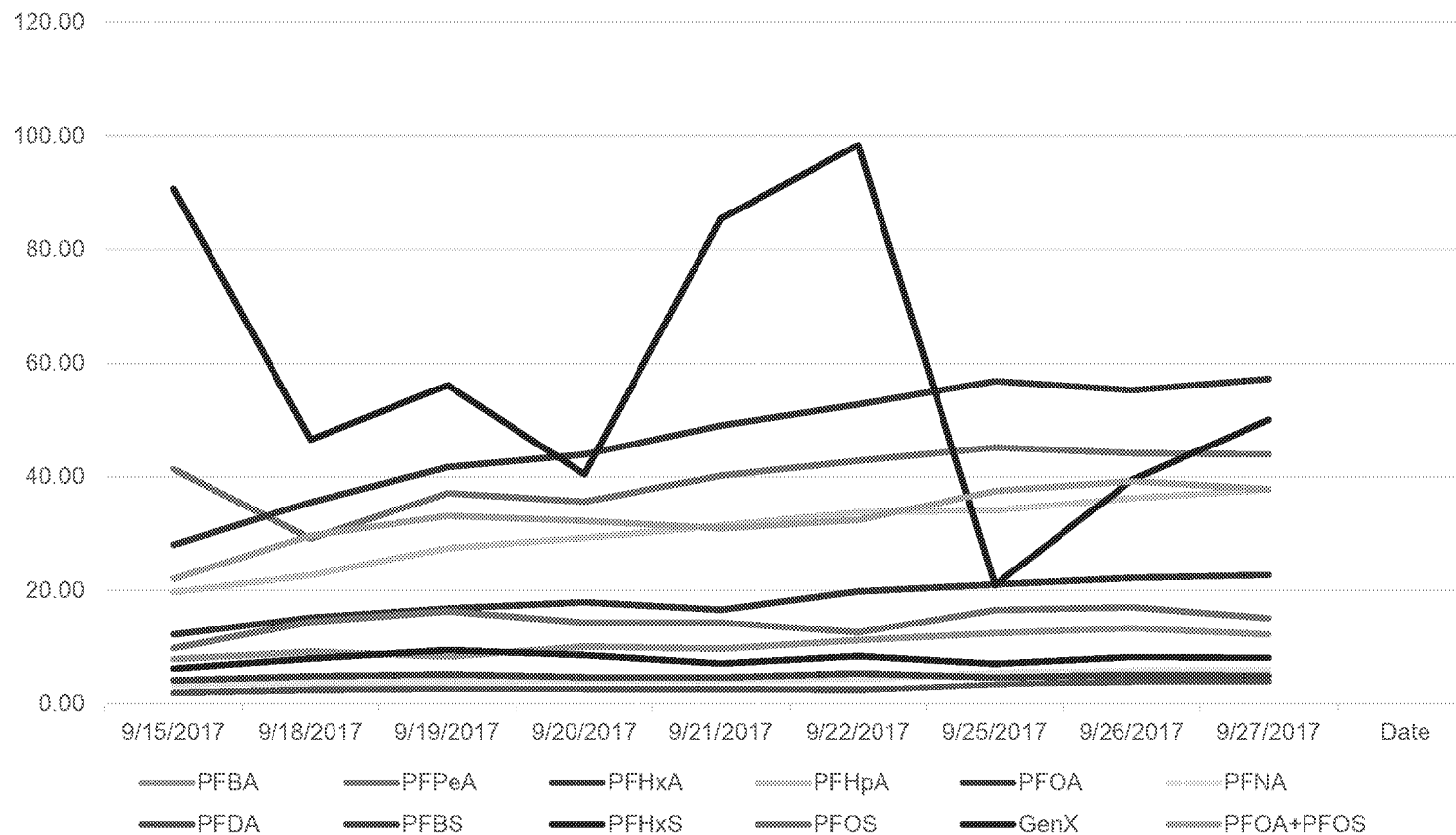


**GenX in the Cape Fear River Basin
Presentation to ECOS – EPA PFAS Call
October 30, 2017**



Latest Cape Fear River Sampling Data

Chemours Outfall 002 (ppt)

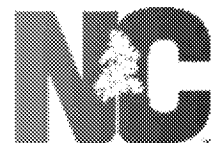
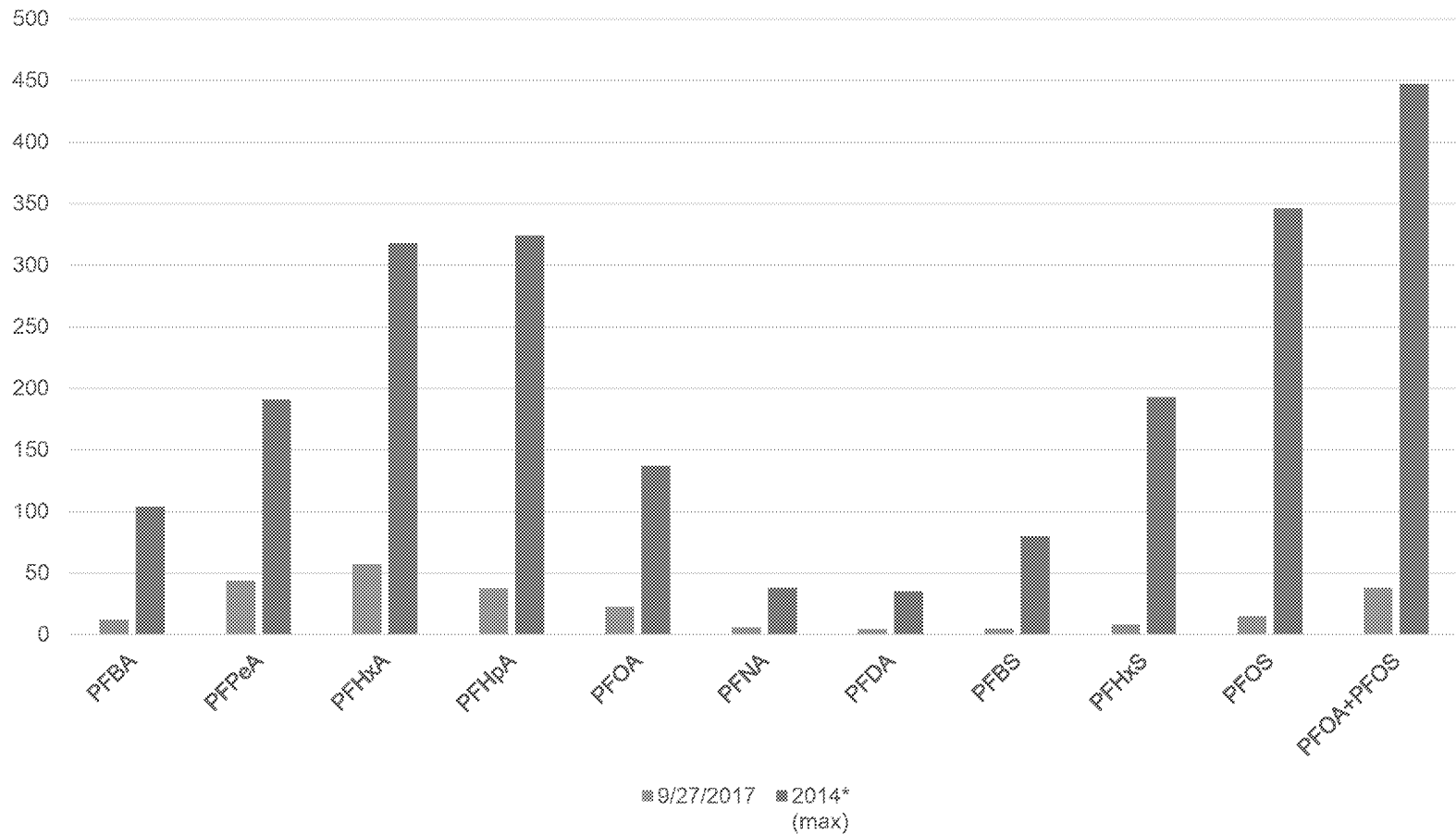


Drinking Water Samples

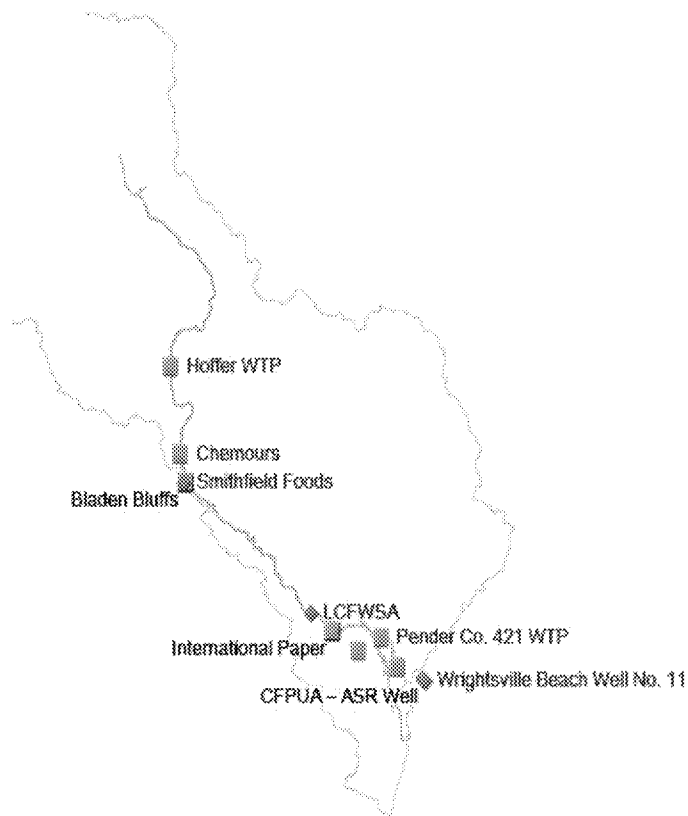
		Results (ppt)		
		9/14/2017	9/21/2017	9/28/2017
International Paper	PFOA	3.65	2.97	3.74
	PFOS	1.64 (J)	1.21 (J)	1.40 (J)
	PFOA+PFOS	5.29 (J)	4.18 (J)	5.14 (J)
	GenX	30.2	33.4	35.3
Cape Fear Public Utility	PFOA	15.1	10.1	12.1
	PFOS	17.2	17.3	14.5
	PFOA+PFOS	32.3	27.4	26.6
	GenX	33.2	36.1	28.9
Pender County	PFOA	12.2	2.74	2.87
	PFOS	0.544 (J)	1.02 (J)	0.977 (J)
	PFOA+PFOS	4.36 (J)	3.76 (J)	3.85 (J)
	GenX	40.4	41.0	42.4
NW Brunswick County	PFOA	9.98	7.96	8.16
	PFOS	7.78	5.98	7.78
	PFOA+PFOS	16.0	15.7	8.2
	GenX	33.1	35.0	24.3



Historic Comparison



DEQ Sampling

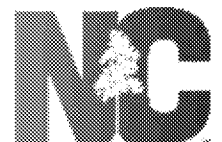


- Process area sampling at Chemours.
- Weekly composite sampling at the Chemours NPDES outfall 002.
- Weekly sampling of finished drinking downstream of the Chemours facility.



Private Well Sampling Results

Private wells sampled:	110
Total # wells with exceedance of the GenX NC DHHS provisional health goal:	40 (36%)
Total # wells reported as not-detected (ND):	36 (33%)
Total # wells with a GenX detection (includes those above the health goal):	74 (67%)
Total # wells with a GenX detection less than the health goal:	34 (31%)
The maximum detected GenX concentration is	1300 ng/L (ppt)

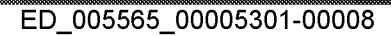


Chemours Sampling Map (Northern Area)

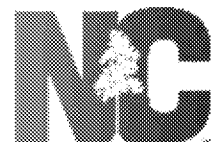


Legend

- WOODS Residential Well Samples (Bank)**
 - 1000 - 1000 ft
 - 1000 - 1000 ft
 - 1000 - 1000 ft
- Channarayana Residential Well Samples (Bank)**
 - 1000 - 1000 ft
 - 1000 - 1000 ft
 - 1000 - 1000 ft
- Channarayana Site Soil Sample Results (Bank)**
 - 1000 - 1000 ft
 - 1000 - 1000 ft
 - 1000 - 1000 ft
- Channarayana Site Monitoring Wells (Bank)**
 - 1000 - 1000 ft
 - 1000 - 1000 ft
 - 1000 - 1000 ft
- 1000-1000 ft of Channarayana Property**
- Channarayana Facility Property**



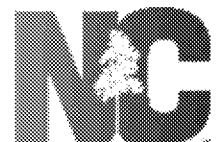
Chemours Sampling Map (Southern Area)



Chemours reported air emissions (pounds per year)

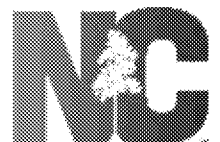
	2012	2013	2014	2015	2016
C3 dimer acid fluoride	500	539	545	669	591
C3 dimer acid (GenX)	1	3	4	3	3
C3 dimer acid ammonium salt	1	3	3	2	2

- All data based on chemical process computational model.
- Air emission data for other emerging contaminants has been received and is being analyzed by staff.
- Source information, emissions data, and stack parameters needed to conduct air dispersion modeling has been received.



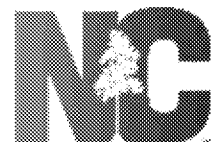
Stack Testing

- DAQ and Chemours discussing/evaluating appropriate methods
- No “off the shelf” method. Developing test methods that will capture and measure the contaminants of interest
- Chemours has indicated that they will test to better quantify air emissions as soon as measurement issues are resolved.



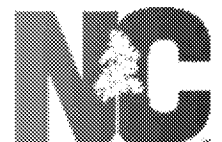
Ambient Air Quality Monitoring

- DAQ and EPA discussing/evaluating appropriate methods, equipment and lab capabilities
- Do the contaminants act as a gas or a particle?
- What analytical detection limits are possible?



RECAP ACTIVITIES

- Monitoring the Facility for surface water and groundwater and
- Air emissions modeling
- Continuing to delineate off-site groundwater contamination and its potential sources
- Reviewing private well water data from Chemours and DEQ for data analysis, data QC, HREs, planning and mapping
- Evaluating chemical pathways (chemicals created and transformed)
- Determine future sampling needs
- Continuing to host community meetings
- Engaging Federal/State and International partners



Questions?

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919-707-8619

